densed milk with 11.73 and 11.34 per cent of caseine and 7.19 and 6.98 of fat, respectively, and calculated that they were made from milks containing originally 2.5 per cent of fat; but he hesitated to call them skimmed. Judged by the above standard, they give certain indications of being skimmed.

Hassall's analyses of condensed milk cited by Hehner show in general greater condensation than those in this paper, but the average percentage of caseine is 16.85; of fat, 10.27; and here, again, skimming is certainly to be suspected.

TABLE I.

Condensed Milk with Cane-Sugar.

No. of Sample.	Percentages.								Times condensed.
	Water.	Fat.	Caseine and Albumen.	Milk-Sugar.	Ash.	Cane-Sugar.	Milk Solids.	Fat in Original Milk.	
20	28.75	8.90	8.71	11.08	1.62	40.94	30.31	3.67	2.42
21	25.83	8.25	10.40	13.63	2.01	39.88	34.29	3.01	2.74
26	25.91	9.14	9.17	13.09	1.86	40.83	33.26	3.43	2.66
27	31.45	8.78	8.21	11.43	1.70	38.43	30.12	3.64	2.41
28	23.91	8.94	9.45	12.60	1.85	43.25	32.84	3.41	2.62
29	27.17	9.22	8.22	11.98	1.77	41.64	31.19	3.70	2.49
30	25.00	9.88	8.92	12.58	1.85	41.77	33.23	3.71	2.66
32	25.49	8.89	9.51	13.05	1.97	41.09	33.42	3.33	2.67
33	28.70	10 22	8.52	16.74	1.81	34.01	37.29	3.43	2.98
35	28.77	11.06	7.97	15.53	2.40	34.27	36 96	3.74	2.95
36	27.44	9.66	9.24	35.17*	1.82	16.67	-	-	-
37	29.83	11.17	10.07	15 44	2.31	31.18	38.99	3.59	3.11
38	23.45	11.14	12.20	13.78	1.99	37.44	39.11	3.57	3.12
41	25.63	10.54	8.89	13.06	1.89	39.99	34.38	3.83	2.75
Average..	26.95	9.69	9.25	13.38†	1.92	38.82†	34.26	3.54	2.74

*See 'Special Remarks,' below. † Excluding No. 36.

TABLE II.

Condensed Milk without Cane-Sugar.

No. of Sample.	Percentages.							Times condensed.
	Water.	Fat.	Caseine and Albumen.	Milk-Sugar.	Ash.	Milk Solids.	Fat in Original Milk	
34	63.25	10.72	10.08	13.79	2.16	36.75	3.64	2.94
40	64.09	9.35	11.75	12.68	2.13	35.91	3.25	2.87

The results given in the second New York report (*loc. cit.*) for condensed milk with sugar are as follows:—

	Average.	Minimum.	Maximum.
Water	25.43	15.45	30.08
Caseine and Albumen	12.15	8.20	18.96
Fat	10.78	5.96	17.01
Milk-Sugar	13.48	10.11	17.77
Cane-Sugar	35.89	-	-
Ash	2.27	1.62	3.62

The average amount of cane-sugar there given is lower than that in the milks analyzed by the writer, and the latter therefore contain, on the average, less milk solids, but among them are several milks of excellent quality. The percentages of fat and caseine are the most important, provided the milk be of good quality in other respects.

SPECIAL REMARKS.

The following details are of interest in connection with the analyses in Tables I. and II.:—

No. 21 was not in perfect condition; a little gas escaped on opening the can, and the milk was soon full of bubbles, caused by fermentation.

No. 27 contained a considerable amount of undissolved cane-sugar.

No. 33 was so stiff that it would not run out of the can, had a cheesy smell, curdled even when very slightly warmed with water, was of a brownish color, and altogether was of inferior quality.

No. 34 was apparently in good preservation, but the metal of the can was darkened inside, as if the tin had been attacked.

No. 36 was a dark brown, glutinous mass, with a smoky and cheesy taste and odor. Apparently molasses or glucose had been used in place of at least some cane-sugar in preparing it, as the result of the analysis indicates. The 35.17 per cent of 'milk-sugar' could not have been pure milk-sugar, and the figures really represent only a reducing power equivalent to that amount of milk-sugar.

No. 38 was quite stiff, of a brownish color, and had a somewhat cheesy smell.

No. 40 was not in perfect condition; the tin of the can was darkened inside, and gas escaped on opening the can. The caseine and albumen given in the table were calculated from the loss; an actual determination by Ritthausen's method gave 9.28 per cent of caseine.

The other milks, not especially mentioned above, were in good condition and well put up.

The percentage of ash of all of the milks, with the possible exception of No. 35, shows that the cane-sugar used was itself free from excessive ash.

H. B. CORNWALL.

Princeton, N.J., Sept. 14.

Chalcedonized Fossils.

A CURIOUS instance of the formation of rose chalcedony on fossils was called to my attention some time ago. The fossils were mostly specimens of species of *Monticulipora*, and often the whole surface was covered with the ring-like chalcedonic formation. The cells of the coral were in most cases still plainly seen, but the whole outer aspect of the fossil was so changed as to make me think for a time that it might prove to be an undescribed species.

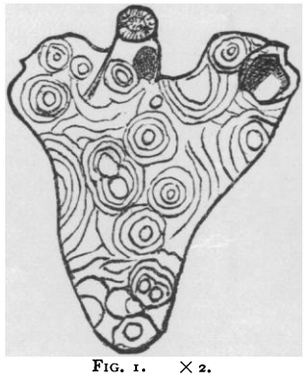

FIG. 1. × 2.

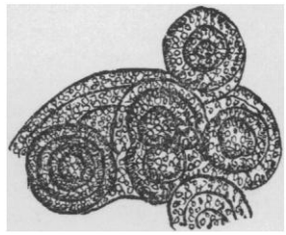

FIG. 2. × 4.

Fig. 1 shows the general appearance of one of the best specimens. Fig. 2 is an enlarged view of some of the rosettes. These corals are not the only ones having this peculiar feature, for certain specimens of *Streptelasma* present the same appearance. In many cases the rosettes are remarkably perfect, and in places the transition from the ordinary appearance to that of the chalcedonized surface is plainly seen.

JOSEPH F. JAMES.

Miami University, Oxford, O., Sept. 5.